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PTO/SB/21 (08-03) Approved for use through 08/30/2003. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE collection of information unless it displays a valid OMB control number. Inder the Paperwork Reduction Act of 1995, no persons are required to respond Application Number 09/815.944 TRANSMITTAL Filing Date March 22, 2001 **FORM** First Named Inventor Keith D. Allen Art Unit 1636 (to be used for all correspondence after initial filing) **Examiner Name** Celine X. Qian Attorney Docket Number R-654 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance communication Fee Transmittal Form Drawing(s) to Technology Center (TC) Appeal Communication to Board Licensing-related Papers of Appeals and Interferences Fee Attached Appeal Communication to TC ~ Petition (Appeal Notice, Brief, Reply Brief) Amendment/Reply Petition to Convert to a Proprietary Information After Final Provisional Application Power of Attorney, Revocation Status Letter Change of Correspondence Address Affidavits/declaration(s) Other Enclosure(s) (please Terminal Disclaimer Extension of Time Request Identify below): RECEIVED Request for Refund **Express Abandonment Request** CD, Number of CD(s) Information Disclosure Statement SEP 2 5 2003 TECH CENTER 1600/2900 Remarks Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Kelly L. Quast, Reg. No. 52,141 Individual name Signature Wart Kelli Date September 17, 2003 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. Typed or printed name Don Mixon Date September 17, 2003 Signature

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/815,944	03/22/2001	Keith D. Allen	R-654	8251
26619	7590 06/17/2003			
DELTAGEN, INC.			EXAMINER	
	740 BAY ROAD REDWOOK CITY, CA 94063		QIAN, CELINE X	
			ART UNIT	PAPER NUMBER
			1636	18
			DATE MAILED: 06/17/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

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BY:

OIPE	ver .					
SEP 2 2 2	in	Application No.	Applicant(s)			
311		09/815,944	ALLEN ET AL.			
TRADEN	Action Summary	Examiner	Art Unit			
		Celine X Qian	1636			
Period fo	• •		·			
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPLIMALING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a replimation of the provision of the period for reply specified above, the maximum statutory period with the period for reply will, by statute the provision of the pr	36(a). In no event, however, may within the statutory minimum of will expire SIX (6) to cause the application to become	y a reply be timely filed f thirty (30) days will be considered timely. MONTHS from the mailing date of this communication.			
1)🖂	Responsive to communication(s) filed on 23 /	<u>May 2003</u> .				
2a) ☐	This action is FINAL . 2b)⊠ Th	nis action is non-final.				
3)□ Dispositi	Since this application is in condition for allowed closed in accordance with the practice under ion of Claims	ance except for formal <i>Ex part</i> e Q <i>uayle</i> , 1935	matters, prosecution as to the merits is C.D. 11, 453 O.G. 213.			
4)🖂	Claim(s) <u>11-16,22-26,28-30,32,33 and 35</u> is/a	re pending in the appli	cation.			
	4a) Of the above claim(s) <u>11-16 and 22-25</u> is/a	re withdrawn from con	sideration.			
5)⊠	5)⊠ Claim(s) <u>32 and 33</u> is/are allowed.					
6)⊠	Claim(s) <u>26,28,29,30 and 35</u> is/are rejected.					
7)	Claim(s) is/are objected to.					
1	Claim(s) are subject to restriction and/o	r election requirement.				
9)□ .	The specification is objected to by the Examine	r.				
10) 🗌 -	The drawing(s) filed on is/are: a)□ acce	pted or b) objected to	by the Examiner.			
	Applicant may not request that any objection to the	e drawing(s) be held in al	peyance. See 37 CFR 1.85(a).			
11) 🗌 -	The proposed drawing correction filed on	_ is: a)□ approved b)[disapproved by the Examiner.			
	If approved, corrected drawings are required in rep					
12)	The oath or declaration is objected to by the Ex	aminer.				
Priority u	ınder 35 U.S.C. §§ 119 and 120					
13)	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.	C. § 119(a)-(d) or (f).			
a)[☐ All b)☐ Some * c)☐ None of:					
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the prior application from the International Buse the attached detailed Office action for a list	rity documents have be reau (PCT Rule 17.2(a	en received in this National Stage			
	cknowledgment is made of a claim for domesti					
a)) ☐ The translation of the foreign language pro Acknowledgment is made of a claim for domesti	visional application ha	s been received.			
Attachment						
2) D Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice	ew Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)			

PTO-326 (Rev. 04-01)

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DETAILED ACTION

Claims 11-16, 22-26, 28-30, 32, 33 and 35 are pending in the application. Claims 27, 31 and 34 are cancelled. Claims 11-16 and 22-25 are withdrawn from consideration for being directed to non-elected subject matter. Claims 26, 28-30, 32, 33 and 35 are currently under examination.

This Office Action is in response to the Amendment filed on 5/23/03.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/23/03 has been entered.

Response to Amendment

The rejection of claims 26, 28-30, 32, 33 and 35 under 35 U.S.C.112 1st paragraph has been withdrawn in light of Applicant's amendment of the claims.

The rejection of claim 26 under 35 U.S.C. 112 2nd paragraph has been withdrawn in light of Applicant's amendment of the claims.

The rejection of claims 26, 28, 29 and 35 under 35 U.S.C. 102 (b) has been withdrawn in light of Applicant's amendment of the claims.

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The rejection of claims 26, 28, 29 and 35 under 35 U.S.C. 103(a) is maintained for reasons set forth of the record mailed on 11/19/02 and further discussed below.

Claim 30 is rejected under 35 U.S.C.112 2nd paragraph for reasons discussed below.

Response to Arguments

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 26, 28, 29 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mansour et al (1988, Nature, vol. 336, No. 24, 348-352), in view of Mountjoy et al. (1992, Science vol. 257, 1248-1251) and Adachi et al (1999, J. Immunology, vol.163: 3363-3368).

In response to the rejection, Applicant argue that the references fail to teach or suggest how to generate a disruption in the specific gene of the instant invention and do not teach or suggest that MC1-R knockout mice would exhibit hyperactivity. Applicant therefore concludes that the combined references do not teach or suggest all the claim limitation and the claims are not obvious.

Applicant's arguments have been fully considered but they are not persuasive. The teachings of the references are discussed in detailed in the previous office action mailed on 11/19/02. The combined teaching of the references gives motivation and reasonable expectation of success to make a MC1-R knockout construct to subsequently generate a knockout mouse

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study the function of this gene (see detailed discussion in previous office action). As discussed in the previous office action, the recitation of "wherein the construct, when introduced into a murine embryonic stem cell, results in a transgenic mouse ..." defines the intended use of the knockout construct, which does not carry patentable weight. Consequently, the phenotype of the mouse is not unexpected results, and the combined teaching of the references meets all the claim limitation. Therefore, the obviousness rejection is maintained.

New Grounds of Rejection

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: breeding the heterozygous transgenic mouse to obtain homozygous transgenic mouse.

Conclusion

Claims 32 and 33 are allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celine X Qian whose telephone number is 703-306-0283. The examiner can normally be reached on 9:00-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel Ph.D. can be reached on 703-305-1998. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Celine Qian, Ph.D. June 13, 2003

Anne-Marie FALK, PH.D

PRIMARY EXAMINER